UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,282	01/16/2004	Jeremy S. Cooper	2018.0050001/JSW	5141

26111	7590	04/06/2006

STERNE, KESSLER, GOLDSTEIN & FOX PLLC
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER
EL HADY, NABIL M

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Office Action Summary	Application No.	Applicant(s)
		10/758,282	COOPER ET AL.
		Examiner	Art Unit
		Nabil M. El-Hady	2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>1/5/2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>15-28</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>15-28</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

1.   Claims 1-28 are pending in this application. Claims 1-14 are cancelled. Claims 15-28 are

new. Claims 15-28 are presented for examination.

2.   The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent
possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29
USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In
re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164
USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
        A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to
overcome an actual or provisional rejection based on a nonstatutory double patenting ground
provided the conflicting application or patent is shown to be commonly owned with this
application. See 37 CFR 1.130(b).
        Effective January 1, 1994, a registered attorney or agent of record may sign a terminal
disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37
CFR 3.73(b).

3.   Claims 15-28 are rejected under the judicially created doctrine of obviousness-type

double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,681,255,

hereinafter "255". Although the conflicting claims are not identical, they are not patentably

distinct from each other because both the instant application and "255" are directed to a method

and system of receiving data over a network at a target bandwidth by calculating a wait time

based on the target bandwidth and an aggregate bytes count, and delaying the data transmitted

with an amount of the wait time in order to satisfy the target bandwidth. Independent claims 15,

21, and 25 of the instant application cite the same limitations in claims 1, 2 and 9, 10,

respectively in "255". The cited limitations in the dependent claims of the instant application are

similar or obvious from in the dependent claims of "255".

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 15-28 are rejected under 35 U.S.C. 102 (e) as anticipated by or, in the

alternative, under 35 U.S.C. 103(a) as obvious over Mogul (US 6,560,243).

7.   Mogul is cited by the examiner in a previous office action.

8.   As to claims 15 and 21, Mogul discloses the invention including a system and method for

retrieving data over a network at a target bandwidth, the method comprising: transmitting a

request for data to a server over the network and receiving the data from the server over the

network (col. 4, lines 10-20); calculating a wait time based on the target bandwidth (col. 2, lines

30-32) and an aggregated bytes count received from the server (the advertised window of the

client in a subsequent data transmission amounts to the aggregate bytes count that will be send

by the sender, and the client is willing to accept and receive, col. 4, lines 37-39,51-56; col. 6,

lines 22-27); waiting the calculated wait time and transmitting a request for additional data to the server over the network after waiting the calculated wait time (col. 4, lines 48-54); and receiving the additional data from the server over the network (col. 2, lines 30-41; and Fig. 4).

9.   As to claim 25, the claim is rejected for the same reasons as claims 14 and 21 above. In addition, a computer program product comprising a computer useable medium having computer program logic recorded thereon for enabling a processor to retrieve data over a network at a target bandwidth is inherent in Mogul's disclosure.

10.   As to claim 16, Mogul discloses repeating waiting the calculated wait time, transmitting a request for additional data to the server over the network after waiting the calculated wait time; and receiving the additional data from the server over the network (col. 2, lines 30-41; and Fig. 4).

11.   As to claims 24 and 28, Mogul discloses the network is the Internet (col. 3, lines 6-9).

12.   As to claims 17-20, 22, 23, 26, and 27 Mogul discloses a wait time calculated based on bandwidth calculations (col. 2, lines 30-32). Mogul does not explicitly disclose determining a start time, current time, and byte count to calculate the wait time. However, it would have been obvious to one skilled in the art at the time of the invention that bandwidth calculations is usually based on bytes count and time, and different computations can be done in any number of ways using these parameters: bandwidth, bytes count and time. Any of these computation would use a start time at the initiation of the retrieval of data, detecting or counting a number of bytes

received, increment an aggregate byte count by the number of bytes received, calculating a

current time, and subsequently calculating a wait time.

13.   Applicant's arguments filed 1/5/2006 have been fully considered but they are not

persuasive. Rejection of claims 15-28 is maintained.

14.   In the remarks, applicants argued in substance that nothing in Mogul teaches or

suggests that the delay is calculated based on an aggregated bytes count.

15.   Examiner respectfully traverses applicants' remarks.

16.   Examiner in a previous office action has indicated that it would have been obvious to

one skilled in the art at the time of the invention that bandwidth calculations is usually based on

bytes count and time, and different computations can be done in any number of ways using

these parameters: bandwidth, bytes count and time. Mogul asserts this obviousness in col. 6,

lines 22-27, where he discloses that during steady state operation, the bandwidth used by the

data flow from the server 106 (the sender) is approximately the advertised window size of the

client 102 (the receiver) divided by the round-trip time (the advertised window of the client

amounts to the aggregate bytes count that will be send by the sender, and the client is willing to

accept and receive).

17.   In addition, Mogul asserts the concept of calculating a delay based on an aggregated

bytes count by disclosing that a target bandwidth is calculated to each data flow as that flow is

created or at a subsequent time in the existence of the flow, and communicates this target

bandwidth (col. 5, lines 46-50).

18.   In addition, Mogul discloses that ACK transmission rate of the receiver controls the

transmission rate of the sender (col. 4, lines 48-49). The receiver, then, can use the ACK

packets to control the bandwidth allocated to the sender by controlling when to issue the ACK

packets and by constraining the amount of data the receiver is willing to receive in a subsequent

data transmission (col. 4, lines 50-54). Normally, the receiver acknowledges data immediately,

and consumes the received data as quickly possible. Consequently, the rate at which the

receiver advances its advertised window is roughly the rate at which the data arrived at the

receiver (col. 4, lines 57-61). The method calculates a period of time for which the receiving

system does not transmit data to the sending system; the delay is from when the receiving

system would normally transmit the data (col. 2, lines 30-33). The transmission of subsequent

data packets on the link by the sending system is thereby delayed for the period of time,

causing the data transmission rate of the sending system to approximate the target bandwidth

(col. 2, lines 34-38).

19.   From the above, it would have been obvious to one skilled in the art that, the period of

time between the last ACK sent by the receiver (start time) and what the new ACK should be,

can be calculated by (bytes count / target bandwidth) in order to control the bandwidth. The

period of time between the last ACK sent by the receiver (start time) and the arrival of packets

from the sender (current time) can be designated as (current time – start time). The current time

of the arrival of packets from the sender, which is normally the time for new ACK, will be

delayed by a period (time of what the new ACK should be – current time). The delay or the wait

time, can be calculated, then, as (bytes count /target bandwidth - (current time – start time).

20.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as

set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date
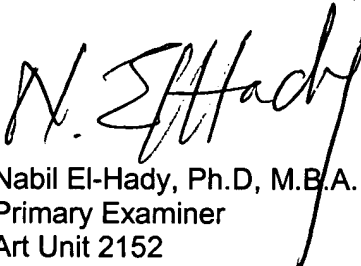
of this final action.

21.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Nabil M. El-Hady whose telephone number is (571) 272-3963. The

examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 3, 2006   Nabil El-Hady, Ph.D, M.B.A.
                                                                Primary Examiner
                                                                Art Unit 2152